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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

SOME CLINICAL OBSERVATIONS ON THE USE OF CATGUT IN GYNE- COLOGICAL PRACTICE.

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Read before the Philadelphia County Medical Society, April 10th, 1878.

Having recently made some practical observations on the use of carbolized catgut in surgical practice, I have thought perhaps it might be useful in eliciting discussion, and bringing to light the experiences of the members, to bring them to your notice. Feeling the common need of a ligature and suture that will have strength and tenacity enough to constrict tissues until the calibre of vessels can become permanently obliterated, and until firm union of incised surfaces can become fully adherent, and yet which will melt away in the solvent fluids of the body, I felt disposed to make a few experiments with the catgut, both as ligature and suture, which I will first report, and then draw my deductions from them.

Case 1.—Ovariectomy; Ligature of Pedicle with Catgut, and Union of Abdominal Wound with Catgut Sutures. Recovery.

Mary Ann C., aged 34, single, native of Ireland, was admitted as a private patient to the Woman's Hospital, under my care, in October, 1877, with an ovarian cyst, after two tappings within a few months. The general history of the case, and the details of her condition, are not necessarily connected with

the subject of this paper, and I will not detain you with them. On October 10th I removed (with the assistance of Drs. Cleveland, Croasdale and Broomall, of the hospital, and in the presence of Drs. Ellwood Wilson and Savery), by an incision into the abdomen, about four inches in length, a multilocular cystic tumor of the left ovary, weighing 28 pounds; there were but slight adhesions; the pedicle was of medium thickness and length. After emptying the several cysts with Hodge's trocar, and drawing the tumor outside the incision, I applied Spencer Wells' clamp to the pedicle, close to the mass of the tumor, and cut it off. I then transfixed the pedicle below the grasp of the clamp, with four strands of Young's medium-sized catgut, prepared in carbolized oil, tied two strands securely upon either side, with treble knots, and then cut between this ligature and the clamp. The extremity of the pedicle showed arteries as large as a hen quill, but no oozing whatever took place. The right ovary was healthy. The pedicle, with ligature, was returned to the abdominal cavity, and the cavity carefully cleansed. The incision was then closed by seven sutures of carbolized gut, including a large margin of peritoneum as well as a considerable bulk of muscular tissue, the sutures being secured by compressed shot. The patient was very much depressed after the operation, the effects of the etherization, which had been unusually badly borne, passing off very slowly, and leaving a condition of nausea with frequent vomiting, lasting over a week. During this time she had to be nourished exclusively by rectal enemata, in small doses, the rectum showing an intolerance of a large

bulk of fluid. Yet from the time of the operation she never had a symptom of peritoneal or abdominal complication. The abdomen remained scaphoid until it began to fill up with fat in its walls. She had not a pain in her abdomen until she took purgative medicine. The shot, with the dried ends of the sutures, gradually dropped off, beginning about the seventh day, coming away with the change of dressing, and the whole line of incision united, except at the extreme lower end, where a small opening remained. As a result of her low vitality, an abscess formed between the integument and the rectus muscle, upon the right side of the incision, which found vent through the lower end of the incision, and the three lower suture tracks. This delayed her convalescence, but she left the hospital quite well, and is now a robust, healthy woman.

Case 2.—Double Ovariectomy; Catgut Ligatures and Sutures. Death.

Henrietta E., single, aged nineteen, native of Philadelphia, was admitted to the Woman's Hospital as a private patient, under my care, in November, 1877, with cystic disease of the ovaries. She had been twice tapped, the last time having been two weeks before admission, since which her general condition had steadily deteriorated, her spirits, ordinarily buoyant, being now greatly depressed. On December 1st I operated on her, with the assistance of Drs. Cleveland, Croasdale, Packard and Broomall, of the Hospital Staff, and in presence of Drs. Goodell and Whelen. Through an abdominal incision of four inches in the median line I emptied, by means of Hodge's trocar, a multilocular cystic tumor of the left ovary (weighing about eighteen pounds), and withdrew the solid portion through the incision. The pedicle, which was long and slender, although containing vessels of very large size, I transfixed with a Baker-Brown needle threaded with silk, through a loop of which I passed four strands of the carbolyzed gut, drawing them through the puncture, tying them as in Case 1, though without having first clamped and cut off the tumor, which afterward proved to have been a serious mistake. After tying, as I thought, securely, I divided the pedicle beyond the ligature, and threw it back into the abdomen. On examination the right ovary was found to be about the size of a walnut, and the seat of extensive cystic degeneration. I transfixed

the pedicle as before, drawing through four strands of gut, which was tied by an assistant and the ovary cut off. On cleaning out the abdominal cavity preparatory to closing the incision, I found active hemorrhage going on on the left side, and discovered, to my dismay, that the tissues of the pedicle grasped by one-half the ligature had retracted after the tension of the weight of the tumor had been removed, and that this portion of the pedicle, containing large vessels, had slipped away from the grasp of the ligature, and was bleeding freely. I immediately applied a clamp close to the uterus, upon the pedicle, and transfixing beyond it, reapplied the gut ligature, making a double knot upon both sides, and again wrapping it twice around the whole mass and tying a double knot. After completing this and cleansing the abdominal cavity again, I found that hemorrhage was taking place upon the right side, and upon examination found that the ligature upon the right pedicle had loosened, and that it was bleeding freely; it was soon arrested by a similar ligature to the one applied upon the left side, and the abdominal cavity again cleansed. The wound was closed by eight gut sutures, including the peritoneum, secured by compressed shot. The long delay in the closure of the wound, and the handling of the intestines, in her debilitated condition, no doubt seriously complicated the case; by the following morning peritonitis had developed, above the incision; the abdomen, above the umbilicus, being tense and tympanitic. She died on the sixth day. The autopsy showed that the ligatures upon the pedicles had maintained their hold, there being no trace of hemorrhage into the abdominal or pelvic cavities. The peritoneal edges in apposition in the line of incision had united along the whole extent of the wound, but the rest of the cut surface had not united; no adhesion having taken place, the edges of the wound were easily separable down to the peritoneal line of union.

Case 3.—Laceration of Perineum; Primary Operation; Catgut Sutures. Complete Union.

Mrs. B., aged twenty-six, primipara; was confined in January, 1878, of a ten-and-a-half pound child. The water broke forty-eight hours before labor set in; the occiput was posterior upon the right side; labor very tedious. After twelve hours spent in dilating the os uteri, I put on the forceps, flexed the head,

drew it into the excavation; rotation took place rapidly, and the head came down upon the perineum. The tissues were rigid, and I found before the vulva became tightly distended that a furrow had been made upon the posterior vaginal wall, nearly to the perineal body, but with great care I was able to get the head over the fourchette without any loss of its integrity. Upon removing my forceps, I found that a loop of cord had descended with the shoulders and was compressed between the child's thorax and the pelvic wall, the pulsations being barely perceptible. I hastened the delivery of the shoulders, and in doing so, the posterior acromion process tore the furrow before mentioned through, externally, dividing the perineum to the sphincter, and continuing the laceration around the rectum, fortunately not dividing the sphincter. I drew the torn surfaces together with three catgut sutures; the uppermost one being inserted just above the position of the upper edge of the rent, and embedded in the sound vaginal tissue; the second one about an inch below the first, also embedded completely in the septum, and the third introduced below the level of the anus, and passing above the sphincter. These were secured with compressed shot, the upper one being tightened up first. The line of sutures was thoroughly painted over with collodion. The patient's knees were bandaged together, and her water drawn regularly every eight hours. On the seventh day the lower shot fell off, with a portion of softened catgut upon each side; and on the eighth and ninth successively, the remaining two. On examination the union was found to be complete, and three weeks after, with the exception of a little irregularity in the line of the rap. e perinei, no trace of any laceration existed; the perineal body was perfect, and the vulva as fully closed as before the labor. For some days after the dropping off of the shot, there was a little purulent discharge from the suture tracks, but it gave no inconvenience and soon cleared up.

**Case 4.—Lacerated Perineum; Catgut Sutures.
Perfect Union.**

Mrs. C., aged twenty-three, primipara, had a long, difficult forceps delivery, in an occipito-posterior position, of a child weighing ten pounds. I saved the perineum when the head passed, but found, when I supported the shoulders, that the vaginal mucous membrane

had given way, and the perineum was thinned out, there being little left but integument. I felt, as in Case 3, the cord below the brim of the pelvis, pulsation having apparently ceased. I hurried the delivery of the shoulders, supporting the mother's tissues as well as I could, but they gave way, and a rent to the sphincter was completed. The child was feeble, but was resuscitated by artificial respiration. On examination I found the posterior vaginal wall consisting of scarcely, if at all, more than the thinned mucous membrane of the rectum, the surface from which the vaginal mucous membrane had been separated looking almost spha-celated. I threw a stream of hot, carbolized water over it, to stimulate it, and then passed five catgut sutures. The upper one, embedded in the vaginal tissue above the line of the rent, was very long, and its passage was attended with difficulty in keeping the point of the Baker Brown needle from appearing upon the surface. With all the others, except the last (the anal stitch), it was impossible to embed them in the tissues, the rectal septum being so thin that it would not hold the thickness of the needle without danger of entering the rectum. However, with the uppermost stitch securely beneath the surface, I felt quite safe, as I consider this stitch of vital importance to the complete success of the primary operation. I secured the sutures by compressed shot, and the after-treatment was as before. The shot fell off in from seven to ten days, and on examining I found the union perfect, there being no trace of vaginal furrow, the perineal body complete, the vulva closed without any granulating surface, and the line of external union exact.

**Case 5.—Lacerated Perineum; Catgut Sutures.
Perfect Union.**

On March 8th, 1878, I was asked by a medical friend to aid him in sewing up a perineum lacerated to the sphincter, in a primipara, after a short but hard labor, without instrumental aid. Four sutures were introduced, of carbolized catgut, as before, the first stitch embedded in the vaginal tissue, just above the margin of the torn surface, and the other stitches nearly fully concealed in the septum, there being in this case enough thickness remaining to allow the needle to pass, with all the sutures pretty well covered. The sutures were secured, as before, by the compressed shot. The shot

dropped off in from seven to nine days. Three weeks after I examined and found the union complete, the external wound cleanly healed, the vulva closed without granulation, the vagina showing no line of cicatricial union, and the perineal body unimpaired.

Case 6.—Perineorrhaphy; Catgut Sutures. Union Incomplete.

Mrs. S., aged thirty-three years, having given birth to three children, the oldest ten years old, was sent to me for treatment by her physician in a neighboring State, with prolapsus, attended with complete loss of the perineum as far back as the sphincter, a portion of which seemed to have been involved, though not sufficient to destroy control of defecation. There was considerable loss of vaginal material, the cicatrix extending one-third the distance from the commissure to the cul de sac of the vagina, with the tissues rigid and inelastic. After denuding a triangular surface, including the whole cicatricial tissue, and extending about half the distance from the commissure to the clitoris, upon the labial margin, I passed five carbolized catgut sutures embedded in the vaginal wall and recto-vaginal septum. The upper one, embracing the whole breadth of the canal just above the margin of denuded surface, required to be drawn very firmly, to press up the upper edge tightly, and the strain upon it, consequently, was very great; the remaining stitches closed up comparatively easily. They were secured by compressed shot. A good deal of erythematous redness surrounded the wound on the third day, but not enough to make the loosening of any sutures necessary except the lowermost one. The remaining shot loosened and came off in from seven to ten days. Some suppuration was apparent in the line of the wound. Examination ten days after the operation showed that while the median portion and anterior edge of the wound had united, the upper stitch had relaxed, and allowed a separation of the adjusted edges before union had been firmly accomplished. So that between the rectum and the vagina, what ought to have been a firm perineal body was only a thin partition, and with a small sinus passing from the back part of the united tissue, emerging just in front of the anus. This sinus closed spontaneously in about one month.

The deductions from these cases are easily made. Catgut embedded in animal tissues

will rapidly soften, and in from seven to ten days will be entirely disintegrated, being, in a closed cavity, gradually absorbed; in an open sinus communicating externally, mingled with the discharge from the sinus, which latter rapidly closes up.

As a ligature for an ovarian pedicle, when tied firmly, it certainly, in the two cases recorded, proved an effectual constrictor. The bleeding in the second case was from the mistake of tying the pedicle upon the one side while the tissues were upon a strain, and not tying tightly upon the other. After the renewed application, firmly made, the bleeding was absolutely controlled.

As a suture, its value depends upon the length of the stitch and the tension to which it is subjected. In the experiment made upon a piece of catgut, I proved the great elasticity of the material when softened. A piece of violin string prepared for surgical purposes, was suspended with a weight of four pounds attached, measuring from the point of suspension to the weight sixteen inches; it was then placed in water, about 100° F., for twelve hours; it was again hung up and subjected to the strain of the weight, and found to have gained in length a fraction over one and a quarter inches, being about one-thirteenth or eight per cent. of its whole length. This fact proves clearly the unfitness of catgut as a suture when the stitch is long and the strain is great, as this stretching of the fibre would make it useless for holding firmly together the surfaces requiring twenty-four to thirty-six hours for adhesion to take place, and as long again for solid union to be effected. For sutures which are superficial, or only moderately deep, when no increasing strain is likely to be produced, they do admirably; they should be secured by compressed shot, and when covered with a coating of flexible collodion (a suggestion for which I am indebted to Dr. A. E. Broomall, of the Woman's Hospital), the shot will drop off with the collodion coating, leaving a perfect union, with little points of ulceration only to mark the insertion of the sutures, no suppuration having taken place along the line of incision. For recent perineal operations, the three cases recorded prove the catgut to be an efficient material for sutures; the tissues involved being soft, flaccid, and yielding, and the vascularity and vitality greatly favorable for rapid union. The advantage in private practice, especially, of not having

to remove wire sutures after the seventh or eighth day is very great, and must recommend the use of this material. It should be moistened in carbolized water for an hour before using, and after its insertion, should be stretched tightly in a straight line before closing the rent; then the shot should be strongly pressed down against the tissues in tightening. Compressed shot furnish the only safe means of securing the gut sutures, as tying tightly is impracticable.

For the secondary operation upon the perineum, the catgut is clearly unreliable as a suture, the tension upon the stitches used in bringing together the edges of denuded cicatricial tissue being too great to be sustained by the extensible fibre of the catgut. The action of the catgut under different degrees of tension upon deep sutures was well shown in the two cases of abdominal incision closed after ovariectomy. In the case where no tympany developed, the abdomen remaining flat, and there being no strain on the sutures, union was perfect, there being no gaping of the edges of the wound at any time. In the case in which abdominal distention rapidly set in, while union took place in the peritoneal edges, there was absolutely none in the integument, the catgut having stretched sufficiently under the strain to allow a separation of the sides of the wound.

METRIC WEIGHTS AND MEASURES, FOR MEDICAL AND PHARMACAL PURPOSES.

BY OSCAR OLDBERG, PHAR. D.,

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The simplicity, harmoniousness, and prospective universality of the metric system should induce us to make it our own as rapidly as possible. That this cannot be done without some preparation, some effort, is obvious enough; and surely every professional man ought to be willing to make the comparatively insignificant sacrifice of time and labor requisite to acquire a sufficient familiarity with metric weights and measures to enable him to use them to the exclusion of the old awkward system, or no system. Discussion is necessary, but "faith without works is dead." We should first make the matter as simple as possible, and then do what we can to learn and teach.

I believe, however, that the simplicity of the metric system is quite unnecessarily obscured

by the many prefixes used in connection with the metric units. Articles are met with in journals, the major portion of which are devoted to an explanation of these prefixes. Why so constantly parade before us the meaning and derivation of *hecto*, and *deka*, and *deci*, etc., when it is almost certain that we will never use more than one or two units of each kind of value in each branch of art or science? To confine myself to medicine and pharmacy, I believe that the *gram* and the *centigram* alone will be used for weights, and the cubic centimeter only for measures, if the latter be not discarded. Of our eagle, dollar, dime, cent and mill, the dollar and cent only are referred to in our daily transactions. As the eagle, dime, and mill are disowned in actual practice, so will the hectogram, dekagram, decigram, and milligram be disowned in writing and dispensing medical prescriptions. Even the term centigram will probably never be used except in the pharmacopœia and other books. Why, then, make the metric system appear difficult and complicated, when, in reality, it ought to appear, because it *is*, as simple as our monetary system! The gram and centigram are the most convenient weight units in medicine and pharmacy, and for that very reason they were exclusively adopted in those countries where the metric system has been for years obligatory on the part of physicians and pharmacists. In no country has any other metric weight unit been yet officially recognized for the purposes named. Shall we sanction an innovation on the practice already established abroad? If we seek to bring about uniformity, then let us at once drop all the prefixes which will never be used, and turn our attention solely to those terms which we ought to agree to make official. We do not keep books and compute accounts in eagles, dollars, dimes, cents, and mills; and, as we will not compute weight in kilograms, hectograms, dekagrams, grams, decigrams, centigrams, and milligrams, it is really unimportant to keep them all in our minds. Is it not easier to speak plain English than to inject a number of artificial terms derived from the dead languages, when there is nothing gained by the latter? It is, to me at least, more convenient to say "ten grams" than to say "one dekagram," and I think all who have actually used metric weights in medicine and pharmacy will agree that the decigram, as a unit, is quite superfluous, if not a positive nuisance. It will

not do to say that the terms "decigram," "centigram," etc., are not *units*, but simply another way of expressing fractional parts of the standard unit, for practically they *are* units, and fractional parts of the gram are most conveniently and familiarly expressed in common English terms. The centigram, however, is a valuable and convenient unit for the purposes of the physician and pharmacist, and should, therefore, be recognized in the pharmacopœia. I can see no objection to abbreviating the term centigram into *cent.* in every day parlance, and even in writing. The use of the word "cent" in reference to money surely would not interfere with its use in weights and measures also, for the context, or the connection in which it is used, would not fail to fix its meaning. The word "pound" is, in England, applied to money as well as weight, without the slightest inconvenience or ambiguity. The simplest system possible would be one modeled upon our monetary system, the metric standard units being adopted, with their subdivisions into one hundred parts. That would give us:—

- 1 meter (about $3\frac{1}{4}$ inches longer than the yard) divided into 100 cents. (centimeters).
- 1 liter (about 2 fluidounces more than the quart) divided into 100 cents. (centiliters).
- 1 gram (equal to about 15 grains or $\frac{1}{4}$ apoth. drachm) divided into 100 cents. (centigrams).

The cubic measures would, of course, not come under this rule; but the cubic centimeter might well be popularly abbreviated into *cube cent.* This arrangement would not be sufficient for universal use; but it would not interfere with the use of kilos, hectos, dekas, dimes and mills, by those whose purposes these subdivisions would best subserve. Probably no one art or science requires more than one or two weight units, and will choose the one or two best adapted to its use. This fact ought to be permitted to facilitate the introduction of the metric system. Chemists will use grams and milligrams (mills.); pharmacists will use grams and centigrams (cents.); grocers might use kilos (kils.) and dekas (deks.?), etc. The fact that the metric system offers so many units from which we may select those best suited to our wants for special uses is admirable, but while all of these units may be actually utilized they will not all be applied together in any one art, science or business pursuit.

In order to facilitate the introduction of the metric system for medical and phar-

macists first agree upon what unit or units of weight shall be official. If the gram alone, then, in advocating its adoption, ignore all prefixes used with it. If the gram and centigram, then drop at once all the other weight units of the metric system. Next, let them agree as to whether or not medicinal fluid measures shall be discarded, and liquid medicinal agents hereafter weighed instead of measured. If, as I believe, it will delay the introduction of the metric system in medicine and pharmacy to insist that when that system is adopted all quantities shall be determined by weight only, then let us, by adopting metric measures as well as metric weights, avoid the opposition which we would encounter from the friends of medicinal fluid measures. Individually I would prefer to discard these measures altogether, whether the metric system is adopted or not, but that they are convenient, popular, and even sufficiently accurate if used with due care, I fully believe; and so long as medicine is given by cupfuls, wineglassfuls, tablespoonfuls, teaspoonfuls and drops, I apprehend as great an opposition against abolishing medicinal fluid measures as against the substitution of the metric for the apothecaries' system of weights and measures. If measures are to be continued, then the cubic centimeter is the most suitable unit. But, whatever may be the units adopted, these should, under no circumstances, be more than two for weights and one or two for measures.

Having agreed upon the units to be employed, we should fix upon the orthography and abbreviations to be recognized as official. As to the spelling, it is thought that "gram" and "meter" will be generally preferred to *gramme* and *metre*. The only proper and safe abbreviation of "gram" I believe to be *Gm.*, and about the abbreviation of "cubic centimeter" there is no difference of opinion, *c.c.* being the one already established. "*Gm.*," with a capital G., cannot be mistaken for "gr.," or "grain," while "gram," or "grm.," may be mistaken for *grain*. Even if the centigram is made an official weight unit in the pharmacopœia, as I believe it should be, I do not think it should be ever written in prescriptions, nor abbreviated. The fractional parts of the gram should be written in decimals, the figures invariably *preceding the sign*, using the common Arabic numerals to further distinguish

the metric prescription from one in which the apothecaries' weights and measures are used. With the latter, Roman numerals are always employed, and then placed *after* the sign.* I think well of the plan to substitute a line for the decimal points, in writing prescriptions, putting the whole numbers on one side, and the fractional parts on the other, in a manner similar to dollar and cent columns, to avoid every possibility of mistake. In fact, should measures be discarded, I would put the "Gm." immediately over the decimal line. A metric prescription, constructed in accordance with the foregoing suggestions (which are not original with the writer), would have an appearance so characteristic as to be at once recognized. Ex.:—

R. Hydrarg. chloridi corros.,	25 Gm.
Potassii iodidi,	10 00 Gm.
Aque,	100 00 c.c.
Tinct. chinch. comp.	100 00 c.c. M.

Or, if measures be discarded:—

	Gm.
R. Hydrarg. chloridi corros.,	0 25
Potassii iodidi,	10 00
Aque,	100 00
Tinct. chinch. comp.	100 00 M.

Liquid medicinal agents, the density of which differs so far from that of water as to not admit of being prescribed or dispensed gram for cubic centimeter, are not many, and those of any considerable importance entering into magistral formulæ are exceedingly few. It would, therefore, be comparatively easy to discard measures, substituting one gram for each cubic centimeter, which would be quite accurate enough except in a few instances—so few as to be easily committed to memory.

As the quantities by weight would be written in grams and fractional parts of the gram, the metric weights intended for our use should be stamped accordingly. Manufacturers of weights and measures should be warned against any deviation from this rule. If in medicine and pharmacy the gram and centigram only are used, and centigrams are written in prescriptions as fractional parts of a gram, then pharmacists do not want any weights stamped "decigrams" (D.G.), "centigrams" (C.G.), and "milligrams" (M.G.). Metric medicinal weights of less value than one

gram should be stamped: 0.50 Gm., 0.20 Gm., 0.10 Gm., 0.05 Gm., 0.02 Gm., and 0.01 Gm.

The practice of graduating glass measures into cubic centimeters and marking the scale in grams, which I have seen some makers guilty of, should be discountenanced. The inter-convertibility of the gram and the cubic centimeter, when referring to distilled water, does not make these terms identical, or even similar, and to speak of "gram graduates" is as absurd as it would be to speak of *inch weights*.

Our metric glass measures, if any, should be graduated in cubic centimeters only.

Until we shall have become quite familiar with the metric units of weights and measures, and with the doses of medicines in metric terms, there can be no doubt that rules for conversion and tables of approximate equivalents will be not only useful but absolutely necessary. Their utility, however, will end as soon as we shall have mastered them perfectly, which requires but little time and effort. A metric posological table will, of course, be needed at once, and permanently.

As soon as we can think in metric terms, then the rules of conversion, the tables of equivalents, and everything pertaining to the old system of weights and measures may profitably be dropped and forgotten. Doctor Francis H. Brown, of Boston, thinks that "to understand the metric system properly, and to use it intelligently, a person should forget the units of length, volume and weight to which he has been accustomed, and should, at once and definitely, familiarize his senses with the new measures, as they are brought into daily use, irrespective of the old system." I agree with Doctor Brown perfectly and literally, but think that our best and only way to *learn* to "understand" and "use" the metric system, having already become accustomed to think in the terms of the old system, is to commence as translators. We would do well to begin by making rough comparisons between the old units and the new, for instance, as follows:—

1 meter is about 3 1/4 inches longer than the yard.
1 liter is about 2 fluidounces more than the quart.
4 cubic centimeters make about one fluidrachm.
1 gram is about 15 grains.

Then let us obtain as many different object lessons as possible, and examine, handle, and use them until they have become perfectly familiar. Get metric weights and graduated

* Apropos of signs, it occurs to me that, as in all reform movements there must be some "relics of barbarism" to refer to, the signs used to designate ounce, drachm, scruple, etc., may be graphically presented as the "relics" in the present issue.

measures, metric prescription vials, and a centimeter rule. Our metric coins, also, may be made to serve a good purpose in this connection. Our five-cent nickels weigh one gram for every cent they represent; our half-dollar and quarter-dollar pieces weigh twenty-five grams for every dollar, or twenty-five centigrams for every cent. Consequently, one dollar in five-cent nickels weighs 100 grams; two dollars in silver half-dollars or quarters weighs fifty grams, and one dollar, twenty-five grams; two five-cent nickels make up ten grams, one of them serving for a five-gram weight; and one silver dime piece weighs 2.50 grams. These coins make good and quite reliable metric medicinal weights, as far as they go. If the weight of each coin were stamped upon it in metric terms, it would be of immense advantage as an aid in popularizing the metric system of weights.

The medical and pharmacal colleges should not be content to merely refer to the metric system in a fashion that seems like "damning it with faint praise," but should at once commence to teach it to their students, thoroughly and practically, using for that purpose a sufficient variety of suitable object lessons. Prescription bottles made strictly on a metric basis, and with their respective capacities in cubic centimeters plainly stamped upon them, can be had for the same price as ordinary glass ware.

The adoption of the metric system in medicine and pharmacy will depend chiefly upon the physicians. They will have to do nearly all the computation or conversion needed, for the pharmacists can, and no doubt will, keep two sets of weights and measures, if compelled to do so by the unwillingness of old practitioners of medicine to adopt the new system. But even if one-half, or three-fourths of the physicians of the present should decline to make use of the metric system of weights and measures in constructing their prescriptions, which will probably be the case, I believe that system should, nevertheless, be officially adopted, and given the preference over the old system, and it should be diligently and thoroughly taught in the schools and colleges.

In the next revision of the U. S. Pharmacopoeia the metric system should be introduced; in works on *materia medica* the doses should be given in metric terms; and pharmacal formularies should recognize no other than the metric system of weights and measures.

An immediate universal change is not to be expected, but we are about as well prepared for it now as we ever will be, and "the way to resume is to resume."

HOSPITAL REPORTS.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF PROF. T. GAILLARD THOMAS, ON DISEASES OF WOMEN.

REPORTED BY P. BRYNBERG PORTER, M.D.

Results of Pelvic Peritonitis.

The first patient whom I small present to you to-day, gentlemen, is Hester K., a native of England, and twenty-five years old. She has been married six years, but has never been pregnant. Let us now get the history of the case; though its chief interest, as you will find, lies in the physical exploration. How long have you been sick? "Five years." Were you never pregnant at all during the first year after your marriage? "No." What symptoms did you have when you were first taken ill? "I was taken with bearing-down pains in my stomach, and also a flooding." Did these come on suddenly? "Yes; I remember, I was cleaning house at the time I took sick." Did you fall down or faint at that time? "No." Did you have to go to bed? "I felt very badly, but I went on with my work the most of the day. The next day I had a good deal of vomiting, and was obliged to go to bed." How long did you remain in bed? "About a week; the doctor who attended me said I had inflammation of the womb and of the bowels." In what way have you suffered since that time? "I have had a great deal of white discharge." What else? "A pain in the side, running around to the back." Is there anything else that you complain of? "A pain here" (placing her hand over the pubic region). The patient also informs me that she suffers greatly from dyspepsia, and that the act of coition is followed by a considerable loss of blood. How is it about your monthly sickness? "I usually have no more pain then than at any other time, except occasionally a little more when my sickness first commences." Do you lose too much or too little blood at your periods? "Not often, but sometimes a little too much, and sometimes not quite enough."

This patient, it seems, was perfectly well up to five years ago, when she had the attack of which she has just told us. When it first commenced, the pain was not severe enough to cause her to take to her bed, but on the second day she had nausea and vomiting in addition, and was so ill that she went to bed and sent for a physician.

Now, which is the most prominent of the

symptoms of which she complains at the present time? Probably that on which she lays the least stress, viz., dyspareunia. This is, of course, a subject upon which she does not like to say much; but we find that in addition to the dyspareunia, the sexual act excites hemorrhage. She has, too, well marked pain in the pelvic region, but it rather surprises me to learn that it is but little, if at all, aggravated at the time of menstruation. We see, then, that she has been a somewhat confirmed invalid for the last five years, and so it is well for us to ask ourselves, in the first place, what is the cause of this? and, secondly, can we remedy it when it has been ascertained?

With a view to answering these questions, I began to make a physical examination, when the first thing I discovered, on inserting my finger into the vagina, was that the cervix was perfectly fixed. I attempted to push it from various points, but the further I pursued the investigation, the more certainly did I find that it was entirely immovable in any direction whatever. In fact, in my whole experience, I have never met with a cervix in a state of more complete fixation than this one.

About the roof of the pelvis, everything was just as fixed as the cervix, and it felt to the finger very much as if there were a broad covering over it. The bladder did not give any sensation of containing fluid; and the same state of affairs was found to exist posteriorly, about Douglas' cul-de-sac. In our entire course this season, there has been no case at the clinic which could at all be compared with this one, for the distinctness with which the evidences of a certain affection which I will presently mention to you are exhibited. I may state, also, that there was considerable tenderness about the pelvic roof, when any pressure was made upon it.

The examination, thus far, however, was not complete, and in order to make it so, I resorted to conjoined manipulation. On account of the peculiar nature of the affection from which the patient has suffered, this could, necessarily, be only imperfectly performed; but enough could be learned from it to show that not only the cervix, but the whole uterus also, was perfectly fixed. In addition, it was demonstrated that there was a hard layer of structure behind the uterus and the bladder, and that the rectum was constricted to a considerable extent. On questioning the patient in regard to the latter organ, I find that she experiences a feeling as if something were pressing upon it, and frequently suffers markedly from rectal tenesmus. There is, in fact, a hard mass all around the rectum, which, though it cannot be technically said to constitute a stricture of the bowel, yet practically has the same effect as one.

This ended the examination; for I did not turn the patient upon the side and introduce the uterine sound, as is ordinarily done in such gynecological explorations. The reason was, that this is one of those cases in which a probe or sound ought never to be passed into the

uterus, unless there is some very special and urgent reason for so doing.

Have we now, in our examination, found anything that will satisfactorily account for all the symptoms from which this patient has suffered. I think so; for I am perfectly satisfied in my own mind as to the cause of her entire trouble. Perhaps another might not be; but every investigator must judge for himself in any given case. The affection to which I have alluded, and which I believe to have given rise to all this woman's sufferings, is pelvic peritonitis, or, as it is sometimes called, peri-uterine peritonitis. It has been known in a general way to the profession for a very long time; but it is only within the last twenty-five years that the subject has attracted the attention and received the consideration which its importance really demands.

You know that there are certain tracts or portions of the body in which inflammations often occur in an isolated manner, without spreading to contiguous parts, notwithstanding the fact of there being a continuity of structure between them. Thus, we have inflammations of the larynx, of the trachea, of the large and minute bronchial tubes (the latter constituting what is known as capillary bronchitis), and yet it is comparatively rare for an inflammatory process in any of these tracts to extend to the others. The same is true in regard to pelvic peritonitis, in which the inflammation has little tendency to spread to the upper portion of the peritoneum.

Pelvic peritonitis is an affection without a knowledge of which it is impossible to get along in the study and treatment of the diseases of women. There are thousands of females in every country who have been the subject of it; though it is not very often that a case is met with in which its results are shown in such a marked manner as in the present instance.

Can we find out what was the cause of the attack of pelvic peritonitis which the patient had five years ago? I fear not. At first, I thought it might have been due to exposure at the time of menstruation, but she informs me that the flow was not upon her when she was taken ill, and that, in fact, she had not menstruated for three months. She seems quite positive, however, that she was not pregnant at that time. When first seized, she had the premonitory symptoms of pelvic peritonitis, and the day following suffered from nausea and vomiting, and, no doubt, from considerable febrile reaction. A very large deposit of lymph took place all over the organs situated upon, or immediately above, the roof of the pelvis, extensive masses of it forming between the uterus and the bladder anteriorly, and also between the uterus and the rectum. That deposit has become organized, has remained in the pelvis ever since, and has been the cause of her sterility.

Let us now take up the symptoms of which the patient complains, a little more in detail.

The first one is leucorrhœa. After the acute attack had passed off there was left a low grade of inflammation, which has been started up afresh from time to time by some peculiar irritation, and the leucorrhœa is one of the effects of it.

Next, dyspareunia is a very marked symptom. During sexual intercourse the uterus is ordinarily movable, and it is to this mobility of the uterus that the immunity from unpleasant consequences is invariably due. But here, as I have said, not only the uterus, but the whole roof of the pelvis, is fixed. The pain in the back which the patient has mentioned is, no doubt, simply of a reflex nature.

What is the prognosis here? Is there anything that will cure the condition that we have found to be present? Emphatically, no. If you were to put this patient upon what is called a "mild course" of mercury, or other absorbents, or the persevering trial of blisters, or other means of counter-irritation, you will only put her to a great deal of useless trouble and expense; for I feel convinced that at the end of a year of such treatment the pathological condition of the pelvic organs would be precisely what it is to day. But not only this; the general health of the patient would, in all probability, be worse than it is now, on account of the interference with the digestive function and the impairment of the blood, by the remedies employed. But, you ask, is nothing to be done for her? Yes, I reply, something. In the first place we have already done her no small amount of good, financially as well as physically, by preventing her (if she will take our advice) from going about from one physician to another, vainly seeking successful treatment for an incurable difficulty. But we can still further benefit her by instructing her to abstain wholly from sexual intercourse, and to remain perfectly quiet at the time of her menstrual periods. In addition, she should take such gentle laxatives as will prevent the accumulation of fecal masses in the rectum; for in such cases these are a frequent source of pain, as well as, at times, of new inflammatory action. Finally, she should have the best of food, and such roborant agents as quinine, iron, and the bitter tonics. These would be given, not with the idea of having any special effect upon the condition of the pelvic organs, but simply for the purpose of sustaining her strength and maintaining her system in the best general state for bearing up under the pain which is inseparable from the pathological results of the peritonitis. As I have remarked, mercury and other absorbents would be utterly useless, and when lymph has become so thoroughly organized as it is here, treatment by counter-irritation can do no possible good. You will please note carefully, however, that I am not now speaking of pelvic peritonitis, in general, but only of its manifestations in this particular case, and others similar to it.

If the course which I have suggested is pursued here, I have no doubt that our patient will gradually become more and more comfort-

able, and that during the next five years life will be much more tolerable to her than it has been for the past five years. A time will come when she will obtain almost complete relief from her sufferings, and that is when the physiological atrophy following the menopause has taken place; but this period is quite distant yet, since the woman is now only twenty-five years old.

Retroflexion; Misapplication of Pessary.

The next patient is Elizabeth J., a native of the United States, and thirty years old. She is a widow, and has had two children, but no miscarriages. The last child was born six years ago. Listen to the history which she gives.

How long have you been sick? "Two months." Were you quite well up to that time? "Yes; I have only been under the doctor's care for that length of time; but I have had a weakness for a good while back, he says." What kind of a weakness is it that you have had? "I have had a white discharge, and have lost too much at the time of my monthly sickness." Do you suffer from any pain? "Yes, a bad pain in my back." And you have had this only during the last two months? "Principally since then." Do you suffer from anything else? "Pain down the inside of the leg."

You have no doubt noticed that this is rather a curious history which the patient has given us; and as I would prefer that she should not hear the remarks which I have to make upon the case, I will dismiss her at once. It is six years since her last child was born, and though she has had a "weakness" for a considerable time, she states that she has grown a great deal worse within the last two months. Now in this connection it is rather a significant fact that it is only during that period that she has been under the care of a physician. Before that the symptoms were very vague; and now she almost imagines that the ailment of which she complains really commenced but two months ago.

On making a vaginal examination I found the uterus in a state of marked retroflexion; and I am almost entirely certain that it has been in this malposition ever since the birth of her last child. There are a great many men in New York, as well as elsewhere, who are always ready to cast a slur upon gynecology. Patients with uterine troubles, they say, get along just as well without treatment as with it. It is doubtless true, in many cases, that no symptom may be presented for a considerable period. A man may have a perforating ulcer of the stomach and yet may be so little affected by it that he is perfectly able to attend to all the business of life without even imagining the presence of anything of the kind, until one day the ulcer eats through the coats of an artery and he suddenly bleeds to death, when the autopsy reveals the fact that it has probably existed for at least ten years. This does not

show that perforating ulcer of the stomach is an affection of no account; and so this case only demonstrates the fact that certain very abnormal conditions of the uterus may exist without any symptoms. All of you, no doubt, remember the case of complete prolapsus uteri, in which a larger part of the bladder and rectum also were outside of the body, and yet the only inconvenience from which the patient suffered was the rubbing of her thighs against the uterus, which was hanging down between them.

Two months ago she came under medical treatment, and since that time, as we have seen, she has been a great deal worse. I do not wish to criticise the treatment merely for the sake of criticism, but in order that I may inculcate a useful lesson by showing you wherein it was imperfect. On making an examination *per vaginam*, I found the uterus completely retroflexed, as I have told you; and yet there was a pessary in the vagina, which had been put there for the express purpose of holding the fundus up in position. Between the cervix and the body of the uterus there was a deep groove, in which the posterior arm of the pessary had buried itself, and there was also a sulcus of sufficient depth and length to accommodate my little finger, which the instrument had caused in the vaginal walls. Now, what has caused the great aggravation of the patient's symptoms within the last two months? The pessary, and nothing else.

Consequently, she dates her trouble to two months back. The difficulty is this: The pessary has been applied (as I see pessaries put in every day) while the uterus was still in a malposition, with the expectation that the instrument was going to replace the organ. It is just as if a surgeon should apply a splint to the extremities of the fragments of a broken bone, with the expectation that the splint would replace the fragments, instead of first doing this by extension, counter-extension, and coaptation, and then applying the splint to hold them in place. I would not be illogical enough to say to such a practitioner, never use a splint; but what ought to be said to him, would be, learn how to treat a fracture before you attempt it.

It is possible that I may be mistaken here, and that the physician may have replaced the uterus before introducing the pessary; but, as I have said, this method of using pessaries is, unfortunately, very common, and it is altogether unlikely that the uterus should have forced itself down in spite of the instrument, if the latter was put in after the organ had been restored to its normal position. If the latter was the case, however, I have no criticism to make upon the case.

A word in regard to the use of pessaries. If, on making conjoined manipulation, or passing the uterine probe, the fundus does not remain in position after an instrument of this kind has been introduced, take it out at once; and if you cannot get the fundus into its proper

place, then do not put in any pessary at all. At the end of forty-eight hours, or, at all events, within a very few days after the introduction of a pessary, you should always make an examination, and if you find that it is not holding the uterus up in good position you should remove it and put in another. If you cannot find one that will do this properly it is a great deal better that the patient should be left without any instrument whatever in her vagina.

Laceration of the Cervix and Perineum; Subinvolution of the Uterus.

The last patient whose case we shall have time to investigate to-day is Catherine B., a native of Ireland, and thirty-three years old. She has been married twice (the last time nine years ago), and has had one child and one miscarriage. Her last pregnancy occurred eight years ago, when she had the miscarriage, and the child which was born at full term was by her first husband. If it were living it would now be eleven years old.

In answer to my inquiries as to how she is affected, she replies that she suffers very greatly from dyspareunia, and that the act of coition is followed by hemorrhage. She also states that this condition of affairs has continued ever since the birth of her child, eleven years ago. After the miscarriage (which occurred about the third month), eight years ago, she says she was obliged to remain in bed for eleven weeks, which shows that she was suffering from some pretty severe illness. Since that time she has never been as well as before. Now, Mrs. B., will you be kind enough to tell us what has troubled you since then? Have you had any pain? "Yes, a great deal; I have had to doctor all the time." Is there any pain in the back? "Yes." Do you have the whites? "Yes." Have you any trouble about the bladder? "Yes." In what way does it trouble you? "I have great pain in passing water." Do you have to pass it too often? "No."

Having thus obtained the history, let us go over the case with the light of the physical examination thrown upon it. It seems that she had no trouble at the time of the birth of the child that was born at full term, so far as any symptoms were concerned; but that she had a long attack of illness after the miscarriage, eight years ago. She has never been well since, and states that she has been treated for uterine disease. The patient lying upon the back, I introduced my finger into the vagina; and the first thing that I discovered was that the perineum was gone. It is not, however, torn through into the rectum. There is a space about the width of one's finger left between the rectum and vagina, and the sphincter ani remains uninjured. Still, the perineal body is divided into two parts by the laceration, one-half of it being on one side, and one-half on the other side of the rent.

In addition, I ascertained that the cervix was very badly lacerated. This laceration was

slight upon one side, but upon the other extended entirely up to the *os internum*. The cervix I found as large as that of a woman several months advanced in pregnancy, and from its torn surfaces there was pouring out a thick and ichorous leucorrhoeal discharge. Next, turning the patient upon the side, I passed the probe nearly four inches into the uterus.

I do not know what kept the woman eleven weeks in bed after the miscarriage which she had, but as I was entirely unable to find any trace of any pelvic inflammation whatever, it seems altogether probable that she was suffering during that time from an attack of septicaemia. Very likely it was due to the retention of a portion of the placenta or membranes; but, of course, we are left entirely to conjecture in regard to the matter.

Now, when did the trouble which we find at present to exist occur? I assume that the whole of it was caused at the time of her first labor; for an abortion at the third month certainly would not give rise to such extensive lesions, under ordinary circumstances, unless very unwarranted force was employed by the physician in attendance. This, you will understand, is altogether assumption; but I think you will, at all events, acknowledge that it is a reasonable assumption. If there had been peritonitis at the time of the miscarriage there would be some evidences of it at the present day. Yet these serious accidents occurred at the time of the first labor, and were followed by no symptoms. Notwithstanding the extensive rupture of the perineum, no prolapsus uteri has resulted. But the laceration of the cervix interfered very seriously with the process of subinvolution. All the patient's symptoms had their origin in the labor twelve years ago, but they were so greatly aggravated at the time of the miscarriage, eight years ago, that she dates her whole trouble back to that. It is quite probable that the laceration of the cervix was the cause of the miscarriage, because this condition, as is well known, has a marked influence upon the nerves supplying the uterus, and is exceedingly apt to cause more or less derangement of their normal functions. The leucorrhoea and the hemorrhage following coition are directly attributable to it, and the menorrhagia indirectly, since it was the cause of the subinvolution, and in consequence of the latter, the lining membrane of the uterus is kept constantly in a hyperæmic state.

The next question that arises is, how is the patient to be treated? You remember what was said in regard to the treatment of the first case I brought before you to day. Here the prognosis is to be directly reversed, for I regard this case as entirely curable, while, in the other, all treatment would be utterly useless, so far as the removal of the pathological condition then existing is concerned. Now, how are all the evils found in our present patient to be done away with? In the first place, with a small copper wire loop, I would carefully remove all

the exuberant growths which undoubtedly exist upon the uterine mucous membrane, and which are due to the constant congestion to which the structure has been so long subject, on account of the subinvolution of the organ. The curette would entirely alter the condition of the membrane, and if it was thoroughly applied upon all sides of the uterine cavity, the little fungoid excrecences, which now act like so many leeches, would be completely destroyed. The patient, from that time, should remain in bed, using hot vaginal injections several times every day, and taking such laxatives as would prevent any clogging up of the lower bowel especially. The next step would be to sew up the lacerated cervix, and in a short time after that I should expect the uterus to become considerably smaller, menstruation to be less profuse, and the general health to improve. Finally, the perineum would have to be restored, and then I have no doubt that the patient might be discharged cured. I use the word *cured* advisedly, though I do not hesitate to say that her condition would hardly be as good as it was before the birth of her child, eleven years ago. This is just the kind of case which it is most appropriate to send to a hospital, because treatment will be of such extreme value to her; and if she could be admitted to the wards of an institution like the Woman's Hospital, she might, in the course of three or four months, be fairly put upon the road to entire recovery.

In connection with this case, I wish to tell you of another, in order to show that the assumptions which it is necessary for us to make, however probable, or even positively undeniable they may seem, are sometimes entirely erroneous. A short time since a case of cancer of the breast, which made the mamma as large as a coconut, was sent to me for operation, by a physician in Texas. Until recently, he had thought the tumor a benign growth, but of late it had begun to increase so rapidly, and to apparently involve the glands of the axilla to such an extent, that there could no longer be any doubt about the diagnosis. When I made an examination of the patient, I found a large and very hard mass in the axilla, and, consequently, gave a very unfavorable prognosis, since I believed that the general system was already infected to a very considerable extent. This morning I removed the breast, and when I had cut down upon the supposed hardened gland, with the idea of taking it out, what was my surprise to find a distinct sense of fluctuation in it. I immediately opened it with a sharp-pointed bistoury, and a clear, straw-colored liquid was discharged from it, showing that it was a little cyst of the axilla, which had nothing whatever to do with the trouble in the breast, and thus causing me to alter my prognosis very materially. It was such an ordinary cyst as might have developed upon the broad ligament, or, indeed, in any part of the body, and the reason that it had felt so hard was on account of the large amount of adipose

tissue with which it was covered. This teaches us, therefore, that we are very liable to err in our opinion, even when we reason with the greatest caution.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Proceedings of a conversational meeting, held at the Hall of the College of Physicians, Philadelphia, April 10th, 1878, Professor Henry H. Smith, President of the Society, in the chair.

A paper was presented by Dr. Albert H. Smith (see page 67) recommending the use of carbolized catgut ligatures in gynecology, and a vote of thanks to the author was passed.

The lecturer also referred to the use of whalebone for ligatures, as recommended by Professor Gross, in a recent communication to the *American Journal of Medical Sciences*.

The President observed that this was an instance of history repeating itself, for in Dorsey's "Surgery," published fifty years ago, this subject of animal ligatures was discussed, and catgut, the tendon of reindeer, and other substances, especially mentioned.

Professor William Goodell was pleased with the paper of the evening; but it only confirmed his opinion of catgut. He thinks it a very treacherous means of securing large blood-vessels, and having faithfully tried it, he would not resort to it again. He had used it in a case of ovariectomy, about six months ago. After transfixing the pedicle he applied the ligature and tied it firmly, but found the loop too loose. The first half of the knot is liable to loosen before the second can be tied firmly. He was obliged to take off the catgut ligature and substitute silk, in the case mentioned. He tried it again, in a subsequent case, but was again obliged to resort to the silk. The objection to the catgut is that it is oiled and slippery, and therefore cannot be waxed. The prospect of its absorption is a strong inducement to use it in cases where the ligature is allowed to remain in the tissues. In a third case of double ovariectomy he transfixed the pedicle with it, and the knot looked so insecure that on the second he did not resort to the gut, but applied the silk. The tendency of catgut to absorb fluids and become softened might lead to fatal hemorrhage after such operations, and he felt that he could not trust it in future, but should prefer fine silk, which is also an animal product, and not irritating. When a silk ligature is applied and the ends cut short it may be allowed to remain, without any danger of slipping, and with a good prospect of its becoming encapsulated. He prefers this method of securing the pedicle in ovariectomy.

There is one case in which the catgut ligature might be useful, i. e., in a laceration of the perineum which extends so high up the septum that Emmet's stitch cannot close it. In that

case interrupted gut sutures could be used in the upper part and the lower secured by silver wire. The advantage of using the gut sutures in such a case lies in the fact that they would be absorbed, and would, therefore, not need to be removed. Whereas, if silver sutures were used, at least two weeks must elapse before a speculum could be safely introduced for their removal.

Dr. C. B. Nancrede had made some ligatures of catgut in January, 1874, and had used them in a number of experiments, and since then has constantly employed them in his practice. There is a great difference in the quality of catgut ligatures; sometimes they are soft and easy to tie, and at other times they are very hard to knot; some are strong and other specimens are weak. He had tied all the principal arteries in the upper and lower extremities, and found them satisfactory. He never yet found the knot to slip, and did not see how it could be made to slip if it were properly tied. He had tried to make it slip and could not succeed. Dr. Agnew has used it for several years, in all his operations, with good results.

The larger sizes of the catgut ligature cannot be broken in tying the knot; no ordinary force can break it; but there would be no objection to having the ligature made several sizes larger than it is, for tying the pedicle in ovariectomy. In the conditions referred to by Dr. Goodell, of ruptured perineum, in which this suture is recommended, the speaker considered it of especial value. In one case, where the sutures were applied high up, and he could not examine for a month afterward, the result was successful, and the ligature gave no trouble. In such cases he considered the catgut suture invaluable. Dr. Agnew puts the ligatures in a two per cent. solution of chromic acid in glycerin, which makes them much more pliable, and they never slip. He has used them to great extent in general surgery, and is satisfied with them.

Dr. C. Seiler remarked that the soaking in chromic acid would coagulate the gelatin, and prevent the ligatures from yielding. He had noticed this effect in violin strings, which, after such treatment, did not get out of tune as soon as ordinary strings.

Dr. Albert H. Smith never had a catgut ligature to break in tying, but had noticed that they would stretch about one-thirteenth of their length, as mentioned in the paper. In regard to the imported carbolized catgut, he had never seen any better results than from ordinary violin strings. The catgut becomes pliable enough for use as soon as it is softened in water. An objection to a very large catgut ligature in these operations is, that it could not be passed through the eye of a needle.

Dr. Nancrede. The reason that catgut stretches is, that it is twisted. The fibrous tissue of which the ligatures are made, is absolutely inextensible. Soaking in water will make the ligatures pliable enough to tie. The objection has always been that it is too rigid.

Young's catgut is pliable, and does not slip. He is in the habit of soaking the ligatures in carbolized oil.

Dr. T. M. Drysdale wished to emphasize the remarks of Dr. Goodell as to the uselessness of catgut ligatures for ovariectomy. He had seen it used, and abandoned as worthless. The rapid shrinking of the pedicle after ovariectomy, makes the ligature unreliable, and the same objection applies to the silk ligature, which is cut off and returned to the abdomen, as recommended by Dr. Thompson. He recalled a case which was operated on by Dr. Pearce, ten years ago. On the second day the patient died from hemorrhage, although the ligature had been tied very tightly. He considered that the catgut was about as unreliable a substance as could be well used, on account of the shrinking of the pedicle, and the other objections that have been urged.

Dr. A. H. Smith, in answer to a question from the chair, said that the first or upper vaginal stitch, in perineorrhaphy, was introduced to

protect the lower stitches from strain. It should be entirely embedded beneath the mucous membrane. There is no danger of fistula, because the stitch is covered throughout its whole extent, not emerging either upon the rectal or vaginal surface. In reply to Dr. Nancrede, he stated that the catgut he had used had generally been Young's, prepared with carbolized oil; that it had stretched and slipped just as much as the common violin string, and that after a very short contact with the moist tissues of the body it becomes as soft and flaccid as any that has not been in oil. So far as the slipping of the knot is concerned, it may be avoided by multiplying it until it becomes firm; but whenever the gut is used for sutures, it should be secured with shot compressed, just as in using wire. The only advantage to counterbalance the objections to the gut for use in the deep stitches of the recent perineal operation is its greater availability in private practice, from its use avoiding the painful withdrawal of the wire sutures, so much dreaded by the patient.

EDITORIAL DEPARTMENT.

PERISCOPE.

Inhalations in Laryngitis.

In a late number of the *London Medical Times and Gazette*, Dr. T. Whipham says—

In all cases of local inflammation—and this remark applies equally to local treatment, either by the laryngeal brush or by inhalation—any treatment which can be directed at once to the seat of the disease has a more immediate, and usually a more lasting effect, than that which operates by the medium of the general circulation. Inflammation of any portion of the skin, for example, due to *external* cause, is far more successfully treated by poultices, lotions, such as lead and opium, or even by cold water, than by diaphoretics, diuretics, or depressants alone.

Now, inhalations have this decided advantage over the laryngeal brush, that they are less alarming to the patient—a matter of no slight importance when the aperture of the glottis is diminished either by swelling or by paralysis of its muscles; that by them the topical treatment can be maintained for a much longer period, and can be repeated at frequent intervals; that in the case of vapors the soothing effect of heat is combined with the specific action of the drug.

Various drugs have proved beneficial when so administered; but it must suffice on the present occasion to mention one or two of those which have brought about the more satisfactory results. Of medicated inhalations, perhaps, the

most grateful to the patient are those of benzoin and acetic acid, the formulæ for which are given in the "Throat Hospital Pharmacopœia, viz.: for the former, a drachm of compound tincture of benzoin in a pint of water at 140° Fahr.; for the latter, half an ounce of acetic acid and of glacial acetic acid are to be mixed together, and of this mixture two teaspoonfuls are to be poured into a pint of water at the same temperature, of which the vapors should be inhaled, either from a narrow-mouthed jug or from an ordinary inhaler. The sedative action of these drugs in many cases gives speedy relief to the symptoms. If much spasmodic cough trouble the patient, the vapors of acetic ether, hydrocyanic acid, and conium produce excellent results. These preparations may be used at frequent intervals during the prevalence of the more urgent symptoms, due caution being exercised with regard to that containing hydrocyanic acid. In the event of there being great irritability of the fauces, etc., in consequence of which any application by means of the laryngeal brush is distressing to the patient, local remedies, such as chloride of zinc, may be employed in an atomized form in Siegle's inhaler, or the hand-ball spray producer. A solution of this salt or of the sulphate may be employed in the proportion of two to five grains to the ounce of distilled water, but should be used more sparingly than the above-mentioned inhalations. One caution should be given to the patient in this method of treatment, viz., that he should avoid all undue exertion in the act of respira-

tion. As a rule, a person who is directed to inhale literally sets to work to perform as many deep inspirations as possible during the time the inhaler is before him. In the first place, this is unnecessary in laryngitis, where the application is merely required for the upper part of the air-passages; and in the second, he adds greatly to his trouble by wearying himself in the process.

In the intervals between the inhalations, topical remedies may still be continued by means of lozenges, but this method can only be employed when the patient's breathing is, comparatively speaking, tranquil. If there be any dyspnoea, it is obvious that the lozenges would be utterly out of place, and probably dangerous, as being liable to be drawn into the larynx. Those composed of extract of lettuce as a sedative, or of citrate or tartate of potash as a sialogogue, in cases where a dry, hot condition of the mucous membrane of the mouth or throat is a prominent symptom, I have found extremely serviceable. Being made up with black-currant paste, they are more or less pleasant to the taste. Should the patient be harassed by constant cough, efforts should be made to allay it, as it tends to keep up the existing hyperæmia; in such cases the morphia-ipeacacuan lozenge (B.P.) frequently has the desired effect.

The Stomach Bandage in Ascites.

Mr. S. Mackenzie urges the value of firm bandaging in dropsy of the abdomen. He gives a case in the *British Medical Journal*, from which we quote the portion referring to his treatment.

March 30th. The abdomen now measured thirty-six inches; its summit was about three-quarters of an inch above the level of the sternum, and it was flat on the surface. The edge of the liver could now be felt three inches below the point of the xiphoid cartilage. No irregularities could be felt on the surface of the liver.

May 11th. The condition of the patient appeared stationary. There was still a considerable amount of fluid in the peritoneal cavity. She passed about forty ounces of urine in the course of the twenty-four hours. *The abdomen was ordered to be tightly bound with a flannel bandage, so as to exercise pressure.*

June 4th. When the bandage was first applied to the abdomen, the pressure caused a feeling of sickness, but soon the patient bore it without discomfort; in fact, it appeared to afford her relief. The measurement around the abdomen, at the level of the umbilicus, was now thirty-three inches. She passed about thirty to forty ounces of urine daily, and did not perspire much. I now ordered a properly-made abdominal support to be constructed for her by the instrument maker. It was arranged with straps, so that it could be tightened to a very considerable degree.

June 29th. The patient expressed herself, and appeared to be, in good general health, but she was still much wasted. The abdomen

looked much smaller, and measured thirty-one and a half inches at the level of the umbilicus. There was pseudo fluctuation on percussion, but it did not convey the impression of being due to fluid. The liver could be felt in the same situation as before. Its surface was smooth, its edge firm, sharp, and regular. The spleen was not to be felt in the abdomen. Its dullness reached the seventh rib in the axillary line. She passed, on an average, fifty to sixty ounces of normal urine daily. She ate and slept well. She was now allowed to get up, but was directed to continue wearing the abdominal support. The latter, owing to the diminution of the size of the abdomen, had required to be altered. After being up in the ward for a few days, the patient was allowed to go into the garden; and there then being no reaccumulation of fluid in the abdomen, she was made an out-patient. This was in July, 1875. The patient has been continually under my observation from then until now. She has had no recurrence of the ascites. Her general condition of health is feeble, but she is able to do her household work and earn her living. Unusual exertion causes slight oedema of the feet. She has never had albuminuria.

Lessons in Ovariectomy.

Mr. K. Thornton, of London, read, in February, before the Harveian Society of London, a paper on *Unsuccessful Ovariectomy*. He said he had learned more from his ten unsuccessful cases than from his more numerous successful ones. Septicæmia was the great cause of mortality to be dreaded; and the adoption of the antiseptic treatment had improved the chances of life. Of the ten unsuccessful cases, seven occurred in his first twenty operations; two in the second twenty; and one in his third twenty cases. He had only had one death in his last thirty-three cases. He then gave an account of these ten cases. In one there was fullness of the remaining vascular area, from the ovarian tumor becoming bloodless previously to its removal. The same thing was seen, but to a less extent, after tapping. In these cases venesection, full and free, was often most effective. In another case, the adhesions to the liver and spleen caused injuries to these viscera, but the hemorrhage ceased when the abdomen was closed; and, on *post mortem* examination, the injuries were found glazed over with lymph. In another case there was hemorrhage which might have been avoided. The pedicle was broad and spread out; and, when transfixed and ligatured, such pedicles are apt to slip, and bleeding to result. His last case had died of acute pleurisy. His conclusions were as follows. 1. Avoid tapping, if possible, as it clouds the prognosis. 2. Operate early. 3. Examine every organ as thoroughly as the one to be operated upon. 4. Never operate without perfect antiseptic precautions, perfect in Mr. Lister's sense. Every student ought to be compelled to study antiseptic treatment.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—"Medicine, the Present and Future" is the subject of an address to the graduating class of the Evansville Medical College, by Dr. J. W. Compton (reprint from the *St. Louis Medical and Surgical Journal*). The address of Dr. C. R. Miles, of the Medical College of the State of South Carolina, has also been separately published.

—Dr. Reuben A. Vance has made many valuable contributions to the surgery and diseases of the rectum. One of his most recent is on the Valves of Houston. Reprint from the Cincinnati *Lancet and Observer*.

—A very well prepared essay on Certain Symptoms of Nervous Exhaustion, by Dr. George M. Beard, of New York, has been reprinted from the *Virginia Medical Monthly*.

—Naso-pharyngeal Catarrh is described by Dr. M. F. Coomes, in a reprint from the *American Medical Bi-weekly*.

—In a pamphlet of 93 pages, Dr. J. Hilgard Tyndale, of New York city, reviews "The Present Status of the Pathology of Consumption and Tuberculosis. He states that it is an 'outline of the present accepted theories in regard to the pathology of pulmonary phthisis.' From a rather hasty examination of some of the assertions the author advances, we should doubt if various of his theories are 'accepted' by the majority of leading pathologists. Indeed, several of his statements of the relation of scrofula to tubercle are certainly discrepant from those generally taught. He makes himself understood, however, and that is something in pathology.

BOOK NOTICES.

The Law of Population. Its Consequences and its Bearing upon Human Conduct and Morals.
By Annie Besant. New York, A. K. Butts.
pp. 47. Price 50 cents.

Mrs. Besant, in this work, gives her reasons for believing that population should be checked by the prevention of conception. She first shows why, and then she tells how. As a married woman of experience and a great moral teacher,

she rushes right in where an ordinary wise man fears to tread. That her book will do harm we doubt, that it will do any good we question, and that readers will find in it the particular information for which, as a rule, they will turn to it, we note will not be the case.

How to Take Care of Our Eyes; with Advice to Parents and Teachers with regard to the Management of the Eyes of Children. By Henry C. Angell, M.D. Boston, Roberts Bros.
pp. 72. Price 50 cents.

Part of these essays appeared in the *Atlantic Monthly*. They are of a popular character, neatly illustrated, free from technical terms, and clearly expressed. Some test types are added, and the sanitary advice on the care and use of the organs is sound, and though familiar to professional men, is so often neglected by those having the care of children, that it is a good thing to have a little work one can recommend, containing just such matter as this one.

Practical Chemistry for Medical Students. Specially arranged for the first M. B. course. By M. M. Patterson Muir, F.R.S.E., etc. London, Macmillan & Co., 1878. Cloth, 12mo, pp. 64. Price 60 cents.

This is one of the small cramming manuals so popular with English students. It is good of its kind, and for about a week before examination would be of decided value to the negligent student.

Litholapaxy, or Rapid Lithotritry, with Evacuation. By Henry J. Bigelow, M.D., Professor of Surgery in Harvard University, etc. Boston, A. Williams & Co. pp. 42.

The gist of this monograph has already appeared in various medical journals, but the eminent author has done well to republish his observations in book form. The method he recommends is a decided advance in the practice of lithotritry. He crushes the calculus rapidly and completely at one sitting; evacuates by a large tube with an elastic exhausting bulb, enlarging the meatus if it is small; and attacks larger calculi than those hitherto managed by the lithotritist. A number of special directions and precautions are added, which, if observed, go to make the operation by no means so formidable as it has usually heretofore been considered by surgeons.

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MINISTERS AS MEDICAL AUTHORITIES.

In the primitive stages of civilization the vocations of physician and priest are always united. The untutored mind of the savage sees in sickness a manifestation of the anger of the gods, or else the result of the supernatural craft of some enemy. He seeks to avoid or to remove it by religious acts, by sacrifice and penance, or by charms and amulets. In such social conditions the "medicine man" is also the one who performs the religious rites, and his medicaments, if he uses any, are aided by prayer and exorcism. *Æsculapius* was the son of *Apollo*, and the pupil of *Chiron*, and from such divine origin and tuition derived his skill in remedies.

To this day, many survivals of this ancient and general belief are discoverable in the popular mind of even the most cultivated nations. Certain diseases, especially syphilis and gonorrhoea, are yet widely regarded in the light of penalties attached by the gods to illicit acts (in spite of the fact that they frequently are found without any such antecedent); and the religious world opposes their prevention, and even their cure. Not unfrequently, we have heard devout people refer to cases of illness and accident as "judgments" on persons for their misdeeds. If a boy is drowned who goes boating on Sunday, if a free liver is attacked with gout, or if a dissolute man is shot in a brawl, these instances are utilized to point the moral that such actions are visited with such results by divine appointment, as warnings to the unconverted.

As now-a-days physicians who have been properly trained in rational medicine sympathize very slightly with such notions, they are often looked upon with undue suspicion by religious people, and especially by their ancient colleague, the clergyman. The latter does not like the positive logic of the natural sciences; and it has become only too obvious that his influence is much more frequently exerted against than for the aims of rational medicine.

This was well put in an open letter from Dr. S. S. CLARK, of Vermont, to the Rev. J. E. RANKIN, D.D., of Washington, published in the *Transactions* of the Vermont Medical Society. That clergyman had overflown in a commendatory letter of a secret cure for Bright's disease, and Dr. Clark addresses him as follows:—

"I have often heard it proclaimed from the pulpit that people would steal the livery of Christ to serve the devil in. It is no less a trite saying among physicians that it is one of the tricks of the empiric to get Rev. —'s name attached to their universal panacea, recommending it to cure all and every disease human flesh is heir to. You can hardly open a newspaper or almanac without finding some Rev. gentleman's name thus used. Why is it? It cannot be that there is real worth in the compound, because we find that many of these mixtures are utterly worthless; and yet, this is not enough: when their sands of life are nearly run out, 'send six cents more for an infallible recipe.'

"Now, I should like to know if there is so great a humbug that you could not find a clergyman to endorse it. I know some honorable exceptions to this rule, but, as a class, far too many are guilty of the accusation. Have we not always extended the courtesies of our profession to them, giving them and their families gratuitous services, or at least for a nominal price, and too often in return finding them setting aside the prescription of some skillful physician, and endorsing and recommending some noisy empiric? Is it because they look upon the science and practice of medicine from the same standpoint as religion, and consider it a mere matter of faith, not capable of scientific demonstration? or do they fail to perceive that the whole spirit of the profession of medicine is founded upon that broad humanitarian principle which acknowledges no secrecy, but admits all facts that can be demonstrated by experience, from whatever source they may be derived? Do they fail to perceive that there is but one school of medicine which embraces all scientific truths, every known remedy of value, commonly known as Rational Medicine, while there are many schools teaching peculiar dogmas or tenets, which are embraced in the former, if of any value?"

The general answer to these questions is that while rational medicine, like all departments of natural science, is founded upon a rigid logic which admits no effect without adequate cause, and absolutely excludes every cause of the so-called "supernatural" class, the clergy, with rare exceptions, will not admit this logic, for fear it will hurt religion. They prefer to

be guided by sentiment, emotion and faith, rather than by reason; they teach others to distrust purely intellectual processes, and set the example themselves; their humanitarianism is often limited to "the household of faith;" and they fail to appreciate how often what they call "sin," and what they point to as its penalty, are both misfortunes only.

There are, indeed, noble exceptions to this; men like the late Frederick Robertson, who welcome every advance of science, and fear nothing from the most rigid reasoning; but they are scarce; and until they become plentiful, we need not expect this quiet opposition between the two professions to cease. It is our duty, however, to do what we can to show the public that a man who writes Rev. before, or D.D. after his name, is not any better, but rather is worse, authority on matters medical, than a plain Mr. or Esq.

NOTES AND COMMENTS.

Myositis Ossificans.

At the Vienna Medical Society, Docent Dr. Nicoladoni presented a girl, seven years of age, as an example of a very rare affection of the muscles, viz., ossification of the muscles of the trunk and limbs. The disease had been going on for about a year, commencing in the muscles of the neck, whence it extended to the spine, the anterior part of the thorax, and the limbs. On each side of the spine a rigid line (sacro-spinales) extends. The scapula is fixed to the thorax; and in the cervical regions are found fibrous cords containing bony plates. The right knee-joint is contracted, and the pectorales are almost entirely ossified. There are only three similar cases on record.

Two Analyses.

A correspondent sends us the following:—

Zinc in Stoppers.—India-rubber stoppers are used by some pharmacists to stopper bottles. A stopper was digested in water acidulated with sulphuric acid, thence filtered. Chlorohydric and sulphydric acids did not produce any precipitates. A precipitate was formed by the addition of ammoniac sulphide; it was white.

The stronger acids dissolved it. The fixed alkaline hydrates and carbonates produced similar precipitates. Zinc, therefore, exists in these stoppers. The zinc, I think, exists as carbonate.

Chromate Lead in Coconut Cake.—These "coconut cakes" are spheroidal and flattened in form, and have a yellowish color. They are found, when properly examined, to contain an appreciable quantity of chromate of lead. They must have a dangerous effect on those eating them. The practice of coloring them should be prohibited.

The Cauterization of Nævi.

Dr. Thiersch applies over the surface of the tumor a little plate of copper, pierced at regular and short distances with small holes. Through these he passes a needle mounted in a cork, and previously heated in a spirit lamp. The cauterization is thus effected very regularly. The same method is applicable to the linear division of the skin by a cutting needle, recently recommended by Mr. Balmanno Squire.

Daltonism.

M. Fabre recently communicated a note to the Académie des Sciences, "On Daltonism: Sanitary Precautions and Preventive Means." The following are his conclusions:—1. Daltonism consists in ignorance or confusion of colors. 2. There are in France more than 3,000,000 persons affected with Daltonism. 3. The number of females attacked, as compared with men, is about one to ten. 4. In nine out of ten cases it may be easily cured in young subjects. 5. The best means of treatment consists in methodical exercise of the eyes on colored objects. 6. The women of a family ought to undertake the development of the chromatic sense in children, and especially those who may commit errors in the denomination of colors. They should be careful not to ridicule these "Daltonians." 7. In future no one ought to be admitted into the service of the railways, the marine, or schools of painting, without an examination as to colors. 8. Ignorance of colors should not exempt from service in armies by land or sea, but the "Daltonians" should never be entrusted with any service connected with colored signals. Regular exercises in colors should be instituted, both in the marine and the army. 9. Examinations and exercises in colors should be established in all schools.

On High Temperatures During and After Convalescence from Enteric Fever.

In the *Lancet*, May, 1878, Dr. Donkin records a case where a young nurse, aged 19, was under observation from January 13th until April 25th, during which period she passed through an attack of typhoid fever, the remarkable point of her illness being the occasional high temperatures, that lasted for only a short period, and reached in the axilla 108° to 110° , while, shortly afterward, the temperature in the mouth as well as in the axilla registered only 97° to 96° . On February 2d, at 2 A.M., 110° was registered, falling rapidly to 102° , 100° , 99° , and 98.5° . In the next hour 104° was noted, and on February 3d, at 5 P.M., 109.6° . Temperatures as high as 105° and over were registered, every evening, till the 15th; 108.6° , 109° , 107.6° , 107.2° , 109.6° . On the 19th there was an early morning temperature of 109.4° .

Elastic Crayons of Nitrate of Silver.

M. Pajot (*Annales de Gynécologie and Gazette Obstet.*, No. 21) takes a laminaria tent two millimetres in diameter, dips it in thick mucilage, and then rolls it in finely powdered fused nitrate of silver, and allows it to dry. He thus obtains an elastic crayon of the ordinary size, which may be introduced into the uterus without fear of breaking. He believes this means to be applicable to other cavities, and for other more powerful caustics.

CORRESPONDENCE.

FOREIGN

Brief Notes from London.

ED. MED. AND SURG. REPORTER:—

While at one of Sir. Henry Thompson's private lithotripsy operations to-day, I observed that Mr. Clover, a surgeon of some note, was employed to administer the anæsthetic, which consisted of nitrous oxide followed by chloroform, by means of Mr. Clover's apparatus. This latter gentleman makes a specialty of the administration of anæsthetics, and is employed and paid by the operating surgeons of London requiring his services, and I am informed has all he can attend to in this branch. Sir Henry Thompson is a quick operator with the lithotrite, grasping one fragment of a calculus after another within the bladder, with a facility that can certainly only come from long use of this instrument. He is a man of strongly-marked nervous temperament, and looks much more like an American than an Englishman.

He is of spare build, with rather large eyes, and long flowing moustache; of courteous but very decided manner; he is an artist of considerable merit as well as a great surgeon. I note these characteristic features of the man, as I presume that many Americans, like myself, who have read this distinguished man's writings, have formed ideas of his physical character that were as far out of the way as were my own.

At Guy's Hospital, to-day, I was shown, by Mr. Bryant and Mr. Forster, of the staff, a case of malignant pustule which was treated by excision; the former distinguished surgeon and author informed me he had never seen a case in his life until recently. In Mr. Calley's service there have been several cases, also, recently. In the wards of Guy's the successful cases have all been treated by excision of the pustule and surrounding cellular tissue as early as possible, under the antiseptic spray of Lister, with large doses of quinine sulph. internally, and stimulants (vinous). All of the patients who have suffered from this disease were employed either in tanneries or along the docks, where it became part of their duty to handle the hides of cattle.

The carbolized spray was used by all the surgeons whom I saw operate to-day at Guy's hospital, excepting Mr. Bryant. A member remarked to me that he also would come to it soon.

Dr. J. Marion Sims, our distinguished countryman, now in Paris, whom I have had the pleasure of meeting frequently, and to whom I am deeply indebted for many courtesies, is now using the carbolized spray in his operations, in Paris and London. Dr. Wecker, the eminent ophthalmologist of Paris, whose clinics are immense, has also begun the antiseptic dressings after the extraction of cataracts.

The gratuitous work done at hospitals and dispensaries, by the distinguished men in our profession, abroad, is something wonderful.

I met Professor Wm. Pancoast, of the Jefferson Medical College, to-day, at the private operations of Sir Henry Thompson: he is en route for Paris. W. H. DALY, M.D.

DOMESTIC.

High Temperature in Typhoid Fever.

ED. MED. AND SURG. REPORTER:—

The following case of typhoid fever, which occurred during my term of service at the Mercy Hospital, in this city, is reported on account of the unusually high temperature and the consequent unexpected recovery of the patient. Several prominent writers affirm that a temperature of 108 degrees in typhoid fever is *always fatal*, showing that even distinguished men may make mistakes as regards prognosis.

CASE.—Michael D., aged twenty-seven years, admitted May 30th, 1878, his history being that of previous good health, strong and robust constitution, well developed, muscular, and weighing about 160 pounds. At the time of

his admission had been sick four days, and presented all the ordinary symptoms of enteric fever, such as dullness of intellect, general soreness, spinal pains, cough, epistaxis, tongue dry and heavily coated, with tympanites, and evening temperature of 104°. This was on the fourth day of the fever. During the next three days the case ran the ordinary course as to temperature and all other symptoms, the afternoon temperature being from 104° to 105°. On the fourth day after his admission, or eighth day of the fever, the morning temperature was 105°. On my arrival at the hospital, in the afternoon, I was informed by his attendant that the temperature at that time was 109°. Thinking the thermometer must be wrong, I used another, and found it to register the same. Pulse 118, and respiration 54 per minute, there being no pulmonary complication, except slight congestion, to account for the hurried breathing. His tongue was hard and dry, and patient in a comatose condition. I made use of the cold packing, with ice to the head. After this treatment had been continued for half an hour the temperature was reduced to 107°. Encouraged by this reduction of temperature, and the treatment producing no bad symptoms, I ordered the patient's body to be thoroughly sponged with cold water every two hours, and ice to be kept constantly to the head; also, internally, the following:—

R. Quinæ sulph.,	grs.ij
Acid muriat.,	gtt.v
Tinct. digitalis,	gtt.xxx.

To be given every four hours; also one tablespoonful of spiritus frumenti every second hour. On my next visit, twenty-four hours afterward, I found morning temperature had been 102°, and at the time of my visit, 3 P.M., 103½°; patient more conscious; able to recognize those around him; tongue less hard and dry; respiration 27 and pulse 96 per minute.

The rose-colored eruption, tympanites, and diarrhoea had by this time fully appeared, showing that we were dealing with a genuine case of enteric fever. The cold sponging and internal treatment, with the addition of fifteen minims of spirits of terebinthina added to each dose of spiritus frumenti, was ordered to be continued, the patient taking sufficient nourishment in the shape of milk, beef tea, etc.

On next day temperature same as on previous day, but other symptoms more favorable. From this time he continued to improve, running the ordinary course of the fever without any unfavorable symptoms. To-day, the twenty-fifth day of his illness, temperature and pulse are normal, appetite good, and patient sitting up, waiting to be discharged from the hospital.

In this case nothing new is claimed by way of treatment, and the case is only reported to show that very high temperature in typhoid fever is not necessarily fatal.

D. A. HENGST, M.D.

Pittsburgh, June 20th, 1878.

Eczema Marginatum of Scrotum and Thighs.

ED. MED. AND SURG. REPORTER:—

A case answering to the description of this disease given by Prof. Van Buren, in his work on "Diseases of the Genito-urinary Organs," has been successfully treated lately, in my practice, by hydrate chloral. The patient had been tormented by it for about fifteen years, and had tried a variety of remedies with either temporary or no relief. The paroxysm of nervous erethism, only to be relieved by scratching off the scales formed by the drying of the moist exudation caused thereby, recurred with great regularity, usually about bedtime, occasionally at intervals during the day. All treatment had been abandoned except perfect cleanliness by baths, the chronicity of the disease, as usual in chronic diseases, having mitigated its severity, and habituated the system to its existence. I was induced to use hydrate chloral from having seen a cure of several cases of prurigo by hyd. chloral, $\mathfrak{z}\text{ij}$ to water, $\mathfrak{z}\text{iv}$. The strength of solution used was $\mathfrak{z}\text{j}$ to $\mathfrak{z}\text{ij}$. After cleansing well with water, and drying the parts before using the wash, the solution was well rubbed in once a day, for four or five days, with relief from the first application. The patient has been completely cured for some time past, and if not cured comforts himself with the belief that his enemy can always be controlled, if it should return. No doubt the disease is common enough, and it is far better to be relieved "*tute, cito et jucunde*" by a simple remedy, than by the strong applications generally used for this class of eruptions. The success of treatment goes to prove that the disease is of parasitic origin, and the remedy a parasiticide as well as an anæsthetic. From analogy, one would suppose that chloral used by gargle or atomizer would be an excellent application to diphtheritic membranes. It is quite likely it has been used in diphtheria, but I have seen no mention of it. Though one case be no test of the excellence of any remedy, the result of this one may warrant a trial of chloral in a similar case.

Brunswick, Ga. R. HAZLEHURST, M.D.

Fracture of the Middle Third of the Femur, With an Ulcer Surrounding the Ankle.

ED. MED. AND SURG. REPORTER:—

On the 2d of May I was called to Millhall, to consult with Dr. McCloskey as to the expediency of amputation, on account of an ulcer. On arrival at the village, I was informed that the case was one of charity to the borough; that the patient had but one leg, that fractured, with an ulcer surrounding the ankle; the other leg having been amputated some years previous on account of an ulcer similar to the one now existing on the broken member; and many of the citizens, in consideration of this amputation, deemed it altogether imprudent to endeavor to save the broken limb. However, in a short time, accompanied by Dr. McCloskey and my

student, Charles W. Musgrove, I arrived at the bedside of the patient, a man, with a fracture (oblique) of the middle third of the femur, produced by a fall. An indolent ulcer, of fifteen years' standing, surrounded the ankle, measuring from three to five inches in breadth. The patient informed us that he had always enjoyed good health; that both father and mother were healthy; never had any venereal disease; no swelling of the glands, etc. The ulcer never appeared to interfere with his general health. Considering the history of his past health, with the present favorable condition, and the great necessity of preserving this only leg, we resolved to give the osseous cells a chance at reparation; for this purpose we placed the limb in a silicate of soda dressing, starting it about two inches above the ulcer, five layers in thickness, extending well up on the hip. Applied a three-pound weight, for the purpose of keeping the limb quiet. Dr. McCloskey then took charge of the case, but as it was a novel one to me, I made weekly visits. About the third week the ulcer presented a marked improvement, and when we removed the dressing, at the end of nine weeks, not only did we have the pleasure of finding the bone perfectly united, but the ulcer healed, all but two small places, the largest about one inch long and half an inch wide. In conclusion, I must say, notwithstanding the existence of a chronic ulcer, in a practice of twenty-five years, I have never witnessed a more satisfactory cure in any bone. Yours, etc., R. ARMSTRONG, M.D.

Lockhaven, Penn.

Bee Stinging as a Therapeutic Measure.

ED. MED. AND SURG. REPORTER:—

In the 13th of July, 1878, number of the REPORTER, on page 44, I find a notice of a story from the German papers, of bee-stinging as a cure for gout and rheumatism. Believing you would be interested to know that the remedy has a wider range of application, allow me to call your attention to a case reported in Vol. III of the *Transactions of the Iowa State Medical Society*. The case was soft cataract, much benefited by one stinging, and positively well after a second application of the same remedy. In the discussion which followed the reading of the paper in the Society, some members were disposed to censure the Doctor—Noyes—that he failed to report the family and gender of the bee, and some thought that, in the interest of the profession, he should have secured the whole swarm from the sting of whose members these results could be expected.

S. E. ROBINSON, M.D.

West Union, Iowa, July 17th, 1878.

PERSONAL.

Dr. Edward C. Spitzka, of New York City, has secured the prize offered by Dr. Hammond, of that city, for the best essay *On the Physiological Action of Strychnia on the Brain, Spinal Cord, and Nerves*.

NEWS AND MISCELLANY.

The International Congress of Hygiene.

A Parisian correspondent writes—

The International Congress of Hygiene, which will be opened on the 1st of August, at the Palais of the Trocadéro, promises to be one of the greatest events in the annals of sanitary reform. This Congress has taken months to organize; and, to ensure practical results, the proceedings will be conducted according to an original and modified method. The meetings will be held twice a day. The first, from 9 a.m. till midday, will be devoted to the examination of questions left to the initiative of individuals. Foreign visitors will then have a good opportunity of bringing forward any special subject with which they may be familiar. The second sitting will be held from 2 to 5 p.m., and will be reserved for the discussion of the six questions proposed by the organizing committee. The questions may be grouped under the following general headings: 1. Infant mortality. 2. The pollution of water courses, utilization of sewage, etc. 3. Food and its adulteration. 4. The dwellings of the poor. 5. Injurious trades and industries. 6. Infectious diseases.

Medical Customs in England.

A gossip correspondent of Harper's *Bazar* says, in a recent letter—

Another question of English expenditure totally misunderstood by Americans is the system of paying or engaging "medical men" and physicians. A lady friend afflicted with the common result of an English winter—bronchitis—asked her landlady if she could recommend a physician. "A physician, ma'am?" said the woman; "certainly; but wouldn't a medical man do as well?" Advice being all my friend required, she investigated this, to her, meaningless distinction, and found that she saved much needless expenditure by sending for a "medical man" instead of a "physician." The latter class of practitioners in England are only employed in special cases of illness, while the "medical man," in every sense as good a doctor, is a general practitioner, supplying his own medicines, and charging in fees only about one-fourth as much as the "physician." It is more a social than an educational distinction, and yet one of those peculiar questions which nothing but a residence among English people can elucidate. Five shillings (about \$1.25) is the ordinary charge of an English medical man, while the physician's fee ranges from £1 to £10. And, by the way, it is customary, when attended by a physician, to place his fee (usually a sovereign) in his hand just as he is leaving the room after each visit. With the medical man, however, it is the rule to pay his account altogether, "after all is over."

OBITUARY.

JOHN EVANS, M.D.

On the 13th of June, 1878, at his residence, near Port Deposit, Cecil county, Maryland, DOCTOR JOHN EVANS, in the sixty-eighth year of his age. Dr. Evans resided for many years at Havre de Grace, Harford county, Md., and practiced his profession very extensively in Harford and Cecil counties for nearly half a century. He was widely known as a surgeon of great ability, and occupied a very eminent position in that department of the profession. He was also skilled in the practice of medicine and obstetrics.

Dr. Evans was for many years a member of the Medical and Chirurgical Faculty of Maryland; and a member from its inception, of the Medical Society of Harford county, Md.

A special meeting of the Medical Society of Harford county was called to take action regarding the death of Dr. Evans. The meeting was held at Havre de Grace on June 29th, when the following resolutions were unanimously adopted:—

WHEREAS, This Society having recently lost, by the hand of death, one of its most valued members, and confessedly one of the ablest surgeons in our State, in the person of Doctor John Evans; Therefore, be it

Resolved, That we place on record our testimony to his many virtues in his daily walk as a man, and our high estimation of his knowledge and skill as a physician and surgeon.

Resolved, That while we are inconsolable for the great loss we have sustained in the death of our friend and fellow laborer, Doctor Evans, we are yet thankful that his life was preserved so long as it was; and the greatness of our sorrow is tempered with the knowledge that he accomplished so much good during his years upon earth, and, through his peculiar skill in his profession, afforded relief to the sufferings of thousands of his fellow men, who now call blessings upon his memory.

Resolved, That we shall always cherish his memory, ever having found him a modest, unassuming gentleman, a true, warm-hearted friend, a sterling man, an honorable, upright citizen, and a physician and surgeon second to none, whose loss cannot easily be replaced.

Resolved, That we tender our heartfelt sympathies to the sorrow-stricken widow and the children—for great, indeed, has been their loss—with the assurance that many, not connected by such close ties of relationship, sincerely mourn with them over the loss of a good and kind-hearted friend.

Resolved, That the Secretary be instructed to furnish an engrossed copy of these resolutions to the family of the deceased; and copies for publication in the PHILADELPHIA MEDICAL AND SURGICAL REPORTER, and the newspapers of Harford and Cecil counties.

Remarks, showing the high appreciation in which the deceased was held, and the sad feelings occasioned by his loss, were then made by Drs. Bromwell, Roland and McCullough, of Cecil, and by Drs. Martin, Cochran, Forwood, and by the President, Dr. W. W. Hopkins, of Harford county. The Society then adjourned.

W. STUMP FORWOOD, Secretary pro tem.

MARRIED.

SHIREY-SPIKER.—At the Central Hotel, Cadiz, Ohio, by Rev. T. S. Hodgson, James L. Shirey, M.D., and Miss Anna Spiker, both of Tippecanoe, Harrison county, Ohio.

DEATHS.

CULBERTSON.—In Piper City, July 14th, 1878, of cholera infantum, Ira DeCosta, infant son of Dr. Samuel D. and Clara K. Culbertson, aged five months.